Title (en)
  Electromagnetic type retarder

Title (de)
  Elektromagnetischer Retarder

Title (fr)
  Ralentisseur électromagnétique

Publication
  EP 1921736 A2 20080514 (EN)

Application
  EP 07119892 A 20071102

Priority
  JP 2006305312 A 20061110

Abstract (en)
  An electromagnetic type retarder comprises a main portion (6) consisting of a stator (12) having a plurality of magnetic coils (L) arranged along a circle and spaced apart from one another and a stator yoke (11) formed of laminated steel plates, and of a steel rotor (13) surrounding the stator (12) and rotated according to the rotation of a tire (1), and a driving device (10) for the main portion (6) to be controlled by an operation signal (7). The magnetic coils (L) consist of three-phase connections of A phase, B phase and C phase, each of the magnetic coils (L) being connected with a capacitor (C) so as to form a resonance circuit, respectively. The driving device (10) has transistors (T) connected in series to each of the three-phase connections and controlled so as to be opened and closed by the operation signal (7). The revolution speed of a rotary magnetic field generated by three-phase AC voltage induced in the magnetic coils (L) forming the resonance circuits by the rotation of the steel rotor (13) is set smaller than the revolution speed of the steel rotor (13).

IPC 8 full level
  H02K 49/04 (2006.01); **H02K 49/02** (2006.01); **H02P 6/24** (2006.01)

CPC (source: EP)
  B60L 7/28 (2013.01); **H02K 49/043** (2013.01); Y02T 10/64 (2013.01)

Citation (applicant)
  JP H1111291 A 19990119 - TOKYO BUHIN KOGYO CO LTD, et al

Cited by
  EP3121951A4; CN103401397A; CN102195441A; EP2363944A3; CN104604107A; EP3139494A4; US8689950B2; US9579982B2

Designated contracting state (EPC)
  DE FR GB

Designated extension state (EPC)
  AL BA HR MK RS

DOCDB simple family (publication)
  EP 1921736 A2 20080514; **EP 1921736 A3 20081029**; **EP 1921736 B1 20110831**; JP 2008125219 A 20080529; JP 4970000 B2 20120704

DOCDB simple family (application)
  EP 07119892 A 20071102; JP 2006305312 A 20061110